

UNCLASSIFIED

RDT&E BUDGET ITEM JUSTIFICATION SHEET (R-2 Exhibit)								DATE February 2002		
BUDGET ACTIVITY 07 - Operational System Development				PE NUMBER AND TITLE 0401134F Large Aircraft InfraRed Counter Measures (LAIRCM)				PROJECT 4942		
COST (\$ in Thousands)		FY 2001 Actual	FY 2002 Estimate	FY 2003 Estimate	FY 2004 Estimate	FY 2005 Estimate	FY 2006 Estimate	FY 2007 Estimate	Cost to Complete	Total Cost
4942	Large Aircraft Infrared Counter Measures (LAIRCM)	0	61,905	47,539	46,790	75,013	53,441	0	0	286,887
Quantity of RDT&E Articles		0	0	0	0	0	0	0	0	0
<p>In FY 2003, Project 674942, Large Aircraft Infrared Countermeasures (LAIRCM), was changed from Project 674885 (same name) to correct an administrative error. This action did not change program content nor the funding.</p> <p>In FY01, the LAIRCM program was initially funded in the C-17 program (PE 0401130F, RDT&E). In FY02, LAIRCM efforts were transferred from the C-17 (PE 0401130F) and the C-130 (PE 0401115F) into a new PE which consolidates LAIRCM RDT&E and Procurement funds into a single PE (0401134F). The LAIRCM program completed all of its required NEW START notifications in FY0. In FY 2001, the LAIRCM program was appropriated \$44,883 thousand into PE 0401130F, C-17 RDT&E.</p> <p>(U) A. Mission Description</p> <p>The Large Aircraft Infrared Countermeasures System (LAIRCM) will provide a much more effective defensive capability for transport and tanker aircraft against the proliferating IR Man-Portable Air Defense Systems (MANPADS) threat. LAIRCM is significantly more effective than today's traditional employment of flares. It will require no operator intervention after the system is activated. LAIRCM will consist of an advanced integrated missile warning system or systems and an active laser countermeasures system. The multi-command Operational Requirements Document (ORD) -- LAIRCM ORD 314-92, was validated on 3 Aug 98.</p> <p>The LAIRCM Phase I Group B contract was awarded to Northrop Grumman on 28 Sep 01, using FY01 PE 41130F funds discussed in footnote above. On 18 Jan 02, Boeing went on contract to install LAIRCM on the twelve Phase I C-17s. The contract for installation of LAIRCM Phase I on the C-130 is scheduled to be awarded in the Spring of FY02. The KC-135 installation contract will be awarded in FY04.</p> <p>LAIRCM Phase I will be deployed on a small number of transport aircraft (12 C-17s and 8 C-130s). LAIRCM Phase II will develop follow-on hardware and modify an additional 59 aircraft, completing the 79 aircraft (43 C-17s, 24 C-130s & 12 KC-135s) required to handle One Small Scale Contingency (1 SSC). In addition, it will bring all of LAIRCM's Phase I aircraft up to the Phase II hardware standard. FY01 was the first year of C-17 LAIRCM funding ; FY02 was the first year of C-130 funding; and KC-135 funding will start in FY04.</p>										
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<p>(U) <u>A. Mission Description Continued</u></p>		
<p>Installation of this system will significantly increase the survivability of transport and tanker aircraft operating in areas with IR MANPADS threats. The first C-17 LAIRCM mod will be completed in early FY04. RDT&E funds shown here, will be used for non-recurring engineering (NRE), systems integration, test and evaluation.</p>		
<p>(U) <u>FY 2001 (\$ in Thousands)</u></p>		
(U) \$0	Note: FY01 is LAIRCM's initial funding and these funds (\$44,883K) are in PE 41130F and include 1 RDT&E C-17 Kit buy.	
(U) \$0	Total	
<p>(U) <u>FY 2002 (\$ in Thousands)</u></p>		
(U) \$26,804	Continue design and software development for basic LAIRCM system plus the integration of LAIRCM on the C-17 which began in FY01 using LAIRCM's initial funding from C-17's PE 41130F.	
(U) \$29,326	<ol style="list-style-type: none"> 1. Initial design, drawings, specifications, and development of peculiar support equipment for installation of LAIRCM on the C-130. 2. C-17 Kit buy <ul style="list-style-type: none"> Group A - one prototype kit Group B - one prototype kit 3. C-130 Kit buy <ul style="list-style-type: none"> Group A - one prototype kit Group B - one prototype kit 4. Software development for both C-17 and C-130 	
(U) \$5,775	Program office support (TDY, training, supplies, and A&AS contract support)	
(U) \$61,905	Total	
<p>(U) <u>FY 2003 (\$ in Thousands)</u></p>		
(U) \$21,846	Continue design and development of the basic LAIRCM system.	
(U) \$20,691	Continue all efforts associated with the integration of the basic LAIRCM system onto the C-17 and C-130 platforms. Modify the first C-17 and begin OT&E. Begin modification of the second C-17 for kitproof. Modify the first C-130 for kitproof.	
(U) \$5,002	Program office support (TDY, training, supplies, and A&AS contract support).	
(U) \$47,539	Total	
<p>Project 4942 Page 2 of 6 Pages Exhibit R-2 (PE 0401134F)</p>		

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<p>(U) <u>B. Budget Activity Justification</u> Large Aircraft IR Countermeasures Program (LAIRCM): This project is in Budget Activity 7, Operational Systems Development as it is an electronic countermeasures systems upgrade to three existing weapons systems (C-17, C-130 and KC-135).</p>																																																																			
<p>(U) <u>C. Program Change Summary (\$ in Thousands)</u></p> <table style="width:100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 55%;"></th> <th style="text-align: center;"><u>FY 2001</u></th> <th style="text-align: center;"><u>FY 2002</u></th> <th style="text-align: center;"><u>FY 2003</u></th> <th style="text-align: center;"><u>Total Cost</u></th> </tr> </thead> <tbody> <tr> <td>(U) Previous President's Budget</td> <td></td> <td style="text-align: right;">62,530</td> <td style="text-align: right;">47,654</td> <td></td> </tr> <tr> <td>(U) Appropriated Value</td> <td></td> <td style="text-align: right;">62,530</td> <td></td> <td></td> </tr> <tr> <td>(U) Adjustments to Appropriated Value</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td> a. Congressional/General Reductions</td> <td></td> <td style="text-align: right;">-596</td> <td></td> <td></td> </tr> <tr> <td> b. Small Business Innovative Research</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td> c. Omnibus or Other Above Threshold Reprogram</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td> d. Below Threshold Reprogram</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td> e. Rescissions</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>(U) Adjustments to Budget Years Since FY 2002 PBR</td> <td></td> <td style="text-align: right;">-29</td> <td style="text-align: right;">-115</td> <td style="text-align: right;">286,887</td> </tr> <tr> <td>(U) Current Budget Submit/FY 2003 PBR</td> <td></td> <td style="text-align: right;">61,905</td> <td style="text-align: right;">47,539</td> <td style="text-align: right;">286,887</td> </tr> </tbody> </table> <p>LAIRCM funding was moved to this PE from the C-17 and C-130 PEs (PEs 41130F and 41115F) during the preparation of the FY02 budget to allow better tracking of the LAIRCM funding as it is installed on C-17, C-130 and KC-135 aircraft.</p>									<u>FY 2001</u>	<u>FY 2002</u>	<u>FY 2003</u>	<u>Total Cost</u>	(U) Previous President's Budget		62,530	47,654		(U) Appropriated Value		62,530			(U) Adjustments to Appropriated Value					a. Congressional/General Reductions		-596			b. Small Business Innovative Research					c. Omnibus or Other Above Threshold Reprogram					d. Below Threshold Reprogram					e. Rescissions					(U) Adjustments to Budget Years Since FY 2002 PBR		-29	-115	286,887	(U) Current Budget Submit/FY 2003 PBR		61,905	47,539	286,887					
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<p>(U) <u>Significant Program Changes:</u> AF awarded the contract to develop and integrate LAIRCM group B for use on the C-17 and C-130 aircraft to Northrup Grumman on 28 Sep 01. AF awarded the contract to integrate and install LAIRCM on the C-17 on 18 Jan 02.</p>																																																																			
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	<u>FY 2001</u>	<u>FY 2002</u>	<u>FY 2003</u>	<u>FY 2004</u>	<u>FY 2005</u>	<u>FY 2006</u>	<u>FY 2007</u>	<u>Cost to</u>	<u>Total Cost</u>																																																										
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(U) D. Other Program Funding Summary (\$ in Thousands)											
	<u>FY 2001</u>	<u>FY 2002</u>	<u>FY 2003</u>	<u>FY 2004</u>	<u>FY 2005</u>	<u>FY 2006</u>	<u>FY 2007</u>	<u>Cost to</u>	<u>Total Cost</u>		
	<u>Actual</u>	<u>Estimate</u>	<u>Estimate</u>	<u>Estimate</u>	<u>Estimate</u>	<u>Estimate</u>	<u>Estimate</u>	<u>Complete</u>			
Procurement (BP1100)											
(U) PE 41134F, C-130	0	0	25,817	32,791	58,409	5,829	68,271	41,830	232,947		
Procurement (BP1100)											
(U) PE 41134F, KC-135	0	0	0	0	0		54,612	1,388	56,000		
Procurement (BP1100)											
(U) E. Acquisition Strategy											
Integration of the LAIRCM subsystems will be accomplished by Northrop Grumman who was awarded the contract on 28 Sep 01. Boeing went on contract to install LAIRCM on the C-17s on 18 Jan 02 . The contract for installation of LAIRCM on the C-130 will be awarded in the Spring of FY02. The KC-135 installation will be determined in FY04.											
(U) F. Schedule Profile											
				<u>FY 2001</u>			<u>FY 2002</u>		<u>FY 2003</u>		
				1	2	3	4	1	2	3	4
(U) Phase I SDD (Oct 02 - Jun 04)								X			
(U) C-17 Aircraft Integration (May 02 - Feb 04)							X				
(U) C-17 #1 modification and OT&E (May 03 - Feb 04)										X	
(U) C-130 Aircraft Integration (April 02 - Jan 04)							X				
(U) C-130 # 1 Modification and OT&E (Apr 02 - Feb 04)										X	
(U) Operational Assessment: (Jun - Jul 02)							*				
(U) C-17 LRIP decision (Aug 02)								X			
X Denotes Start											
* Denotes Stop											
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RDT&E PROGRAM ELEMENT/PROJECT COST BREAKDOWN (R-3)							DATE February 2002				
BUDGET ACTIVITY					PE NUMBER AND TITLE			PROJECT			
07 - Operational System Development					0401134F Large Aircraft InfraRed Counter Measures (LAIRCM)			4942			
(U) A. Project Cost Breakdown (\$ in Thousands)											
						<u>FY 2001</u>		<u>FY 2002</u>		<u>FY 2003</u>	
(U)	Continue LAIRCM install design & software development							26,804		21,846	
(U)	Prototype kit buys (2) and installs (1C-17 and 1 C-130)							29,326		20,691	
(U)	Program office support (A&AS contract support, TDY, etc.)							5,775		5,002	
(U)	Total							61,905		47,539	
(U) B. Budget Acquisition History and Planning Information (\$ in Thousands)											
(U) Performing Organizations:											
	<u>Contractor or Government</u>	<u>Contract Method/Type</u>	<u>Award or Obligation</u>	<u>Performing Activity</u>	<u>Project Office</u>	<u>Total Prior to FY 2001</u>	<u>Budget FY 2001</u>	<u>Budget FY 2002</u>	<u>Budget FY 2003</u>	<u>Budget to Complete</u>	<u>Total Program</u>
		<u>Vehicle</u>	<u>Date</u>	<u>EAC</u>	<u>EAC</u>						
	Total System Cost	CPAF	28 Sep 01	N/A	N/A			50,630	39,652	152,443	242,725
	<u>Product Development Organizations</u>										
	System Program Office/Other							5,775	4,887	20,000	30,662
	Govt Costs										
	TBD										
	<u>Support and Management Organizations</u>										
	TBD										
	<u>Test and Evaluation Organizations</u>										
	TBD							5,500	3,000	5,000	13,500
(U) Government Furnished Property:											
	<u>Item</u>	<u>Contract Method/Type</u>	<u>Award or Obligation</u>	<u>Delivery</u>		<u>Total Prior to FY 2001</u>	<u>Budget FY 2001</u>	<u>Budget FY 2002</u>	<u>Budget FY 2003</u>	<u>Budget to Complete</u>	<u>Total Program</u>
	<u>Description</u>	<u>Vehicle</u>	<u>Date</u>	<u>Date</u>							
	Project 4942										

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BUDGET ACTIVITY			PE NUMBER AND TITLE				PROJECT		
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(U) Government Furnished Property Continued:									
<u>Item</u>	<u>Contract</u>	<u>Award or</u>	<u>Delivery</u>	<u>Total Prior</u>	<u>Budget</u>	<u>Budget</u>	<u>Budget</u>	<u>Budget to</u>	<u>Total</u>
<u>Description</u>	<u>Method/Type</u>	<u>Obligation</u>	<u>Date</u>	<u>to FY 2001</u>	<u>FY 2001</u>	<u>FY 2002</u>	<u>FY 2003</u>	<u>Complete</u>	<u>Program</u>
<u>Vehicle</u>		<u>Date</u>	<u>Date</u>						
<u>Product Development Property</u>									
TBD									
<u>Support and Management Property</u>									
TBD									
<u>Test and Evaluation Property</u>									
VIPER Laser	On loan from								
	USSOCOM								
<u>Subtotals</u>				<u>Total Prior</u>	<u>Budget</u>	<u>Budget</u>	<u>Budget</u>	<u>Budget to</u>	<u>Total</u>
				<u>to FY 2001</u>	<u>FY 2001</u>	<u>FY 2002</u>	<u>FY 2003</u>	<u>Complete</u>	<u>Program</u>
						50,630	39,652	152,443	242,725
Subtotal Product Development						5,775	4,887	20,000	30,662
Subtotal Support and Management									
Subtotal Test and Evaluation						5,500	3,000	5,000	13,500
Total Project						61,905	47,539	177,443	286,887